

Table 1

	Fish given oil globules embedding antigen		Controls	
Fish	Agglutination titer		Agglutination titer	
	Group-1	Group-2	Group-3	Group-4
Fish 1	256	32	16	4
Fish 2	1024	1024	16	2
Fish 3	64	256	2	8
Fish 4	64	128	64	16
Fish 5	32	256	4	32
Fish 6	256	128		2
Fish 7	128	1024		2
Fish 8	128	1024		16
Fish 9	128	256		16
Fish 10	256	32		64

1)3000 fish a group

2)Group-1 10% feed oil + formalin-killed *Edwardsiella tarda* ( $10^9$  cfu/ml)

3)Group-2 1% feed oil + formalin-killed *Edwardsiella tarda* ( $10^7$  cfu/ml)

4)Group-3 negative control (normal fish)

5)Group-4 Given with a mixture of bacteria,feed oil and emulsifier

6)Titer was examined in 3 weeks after final given

7)Water temperature : 23-25°C

Table 2

		Fish given oil globules embedding inactivated cells	Comparative Example		
Antibody titer		Fish 1	1024	Fish 1	2
		Fish 2	1024	Fish 2	4
		Fish 3	256	Fish 3	2
		Fish 4	32	Fish 4	16
		Fish 5	64	Fish 5	16
		The number of deaths	The number of deaths		
Days after injection	7	0	0		
	8	0	0		
	9	0	1		
	10	0	4		
	11	1	1		
	12	1	0		
	13	3	1		
	14	0	3		
Death rate		50%	100%		